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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,793	10/27/2000	Bruce D. Melick	P04254US1	6695

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EXAMINER
HAMILTON, MONPLAISIR G

ART UNIT	PAPER NUMBER
2172	

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/698,793	Applicant(s) MELICK ET AL.	
	Examiner Monplaisir G Hamilton	Art Unit 2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 January 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 11-44* is/are pending in the application.

4a) Of the above claim(s) *9 and 10* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 11-20 and 35-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *21-34* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-20 were pending. The communication filed on 1/14/03 canceled Claims 9 and 10, amended Claim 17 and added Claims 21-44. Claims 1-8 and 11-44 remain for examination.

Response to Arguments

2. Applicant's arguments filed on 1/14/03 have been fully considered but they are not persuasive.

Applicant argues: "... Jungers is directed towards the data stream, and not a transport stream. Jungers is directed towards solving the problems of tracking the delivery and reassembly of received messages or segments and to complete tables or sections so that it can be ascertained whether the necessary data structures have been received (col. 2, lines 1-30)... Claim 6 explicitly requires the limitation of "writing a linear file allocation table giving the name of the field and location within a transmission at which the field contents start and stop." This limitation is not disclosed in Jungers. This is apparent because Jungers is directed towards the data stream and not a transport stream. Therefore, Jungers might provide information regarding the location of data within a data structure, but does not provide for "writing a linear file allocation table giving the name of the field and the location within a transmission at which the field contents start and stop." Therefore, Jungers does not teach all the limitations of claim 6 and this rejection should be appropriately withdrawn."

Examiner believes that Jungers discloses the claimed "writing a linear file allocation table giving the name of the field and location within a transmission at which the field contents start and stop". Jungers discloses "the creation date is used by, asset tracking systems ...the directory

structure comprises a number of table fields, indicative of a number of table records within the structure, and a plurality of table records, where N is the number of tables, table records comprises a table type field, a table identification field, a number of messages field, a message length field" (col 3, lines 45-55). This disclosure anticipate the claimed "writing a linear file allocation table giving the name of the field and location within a transmission at which the field contents start and stop" the message length field defines the "location at which filed contents start and stop". The message length relates the start and stop positions of the message. The message is equivalent to the claimed "field content". Furthermore, Jungers discloses the claimed within a transmission aspect of the claimed invention. The data stream of Jungers is a transport stream (col 3, lines 1-5; col 3, lines 60-65; col 4 lines 20-30, 50-55; col 5, lines 25-35; col 11, lines 20-25). Therefore, Examiner holds that Jungers anticipates the claimed invention.

Applicant further argues "Neither Fullerton nor Jungers discloses the limitation of " a linear file allocation table including a field name for one or more subdivisions of data and pulse start and end position information" as required by claim 1. Neither Jungers nor Fullerton provide the proper motivation to combine. There would be no motivation to include pulse position information in Jungers because Jungers is related to the data structure and data stream and not to a transport stream or a transmission. The data structure of Jungers allows applications to ascertain whether necessary data structures have been received, but does not provide for determining the position of data within the transmission, but only the position of data within the data structure or stream. Fullerton is directed towards transmission using ultrawide-band communication but is not directed towards linear databases, therefore, Fullerton could not provide the motivation or suggestion to combine. Neither reference provides any appropriate motivation or suggestion to combine, therefore this rejection must be withdrawn."

Examiner holds that the combination of Jungers and Fullerton renders the claimed invention unpatentable. As discussed above, Jungers explicitly states that the data stream is a transport stream (col 3, lines 60-65; col 4 lines 20-30, 50-55; col 5, lines 25-35; col 11, lines 20-25).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation for combining comes from being able to decode the transmission stream (Fullerton: col 18, lines 25-55; col 20, lines 50-60; Jungers col 4, lines 20-30). Jungers describes a method of decoding and encoding that uses a directory structure (FAT) to decode the transmission. Fullerton uses control information to decode the transmitted stream (col 18, lines 55-60).

Jungers does not explicitly state that the claimed "pulse start and end position information" is part of the directory structure (FAT). However, Fullerton discloses a linerization ROM is used to decide whether a pulse represents a 1 or 0 (col 21, lines 9-17). The time value represents the relative position - time delay at which to send a 1 or 0. The pulse start and end information is equivalent to the combined teachings of Fullerton and Jungers. Jungers has a stream of data, which is essentially a sequence of 0's, and 1's (pulses) that represent the field contents. Therefore, at the time the invention was made, it would have been obvious to a person

of ordinary skill in the art to modify the teachings of Jungers such that the directory structure contain pulse position information. One of ordinary skill in the art would have been motivated to do this because it would allow the receiver to decode the transmission (col 20, lines 53-60).

In addition Fullerton discloses a psuedo-random code that is used to provide channelization, which allows an impulse radio to communicate many independent channels simultaneously (col 1, lines 50-53; col 2, lines 25-30). The transmitter encodes control information with the transmitted signal. This control information would also include pn-code, scheduling or timing information with is equivalent to the claimed pulse start end position information. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Jungers such that the directory information also include information that represented pulse start end position information. One of ordinary skill in the art would have been motivated to do this because it would the receiver to decode the transmission on the different channels (col 18, lines 15-25).

Election/Restrictions

3. Newly submitted Claims 21-34 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 1-20 disclose a database and method for transmitting the database, Claims 21-34 relate to a protocol, used to communicate information between a device and communication channel interface. These two inventions are distinct.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, Claims 21-34 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 17 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

While applicant may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term. See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The term "File Allocation Table" in Claims 17 and 35 is used by applicant to mean "an identifier that points to particular decoding templates" (spec: page 8, lines

10-20) while the accepted meaning is "A table or list maintained by some operating systems to manage disk space used for file storage. Files on a disk are stored, as space allows, in fixed-size groups of bytes (characters) rather than from beginning to end as contiguous strings of text or numbers. A single file can thus be scattered in pieces over many separate storage areas. A file allocation table maps available disk storage space so that it can mark flawed segments that should not be used and can find and link the pieces of a file." (Computer Dictionary)

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Referring to Claims 1-5:

Claims 1-5 are related to nonfunctional descriptive material. The claims as presented are a recitation of the information that is stored in a database. This database is transmitted over a network to a receiving device. There is no claimed functional interrelationship between the stored data or the computing process performed by the computer.

In addition, Claims 1-5 disclose, "a structured linear database adapted for storage in a machine readable storage medium... " These claims are not tangibly embodied in a computer-readable storage medium.

Claim Rejections – Prior Action

6. Referring to Claims 1-8 and 11-16:

Please see office action dated 10/09/2002.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 35, 38-41 and 43 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6438140 issued to Jungers, herein referred to as Jungers.

Referring to Claim 35:

Jungers discloses a method of providing universal data exchange, the system comprising: organizing data into data fields (Fig 1; col 2, lines 15-20); identifying the data fields in a file allocation table (directory) (Fig 1; col 3, lines 10-15); providing a receiving device capable of understanding the file allocation table (col 4, lines 20-25); transmitting the file allocation table to the receiving device; transmitting the data fields identified in the file allocation table (col 4, lines 50-55); and identifying the data fields by the receiving device according to the file allocation table (col 4, lines 50-55; Fig 4; col 5, lines 30-65; col 6, lines 1-15).

Referring to Claim 38:

Jungers discloses the limitation as discussed in Claim 35 above. Jungers further discloses the fields identified in the file allocation table are identified by reference to a standard format understandable by the receiver device (col, 4 lines 55-67; col 5, lines 1-5).

Referring to Claim 39:

Jungers discloses the limitation as discussed in Claim 35 above. Jungers further discloses the digitally encoded data in a public formatted structured linear database is used (col 1, lines 35-45).

Referring to Claim 40:

Jungers discloses the limitation as discussed in Claim 35 above. Jungers further discloses the digitally encoded data in a privately formatted structured linear database is used (col 4, lines 65-67).

Referring to Claim 41:

Jungers discloses the limitation as discussed in Claim 35 above. Jungers further discloses the steps of transmitting are performed using time modulated ultra wideband radio frequency transmissions (col 4, lines 35-50).

Referring to Claim 43:

Jungers discloses the limitation as discussed in Claim 35 above. Jungers further discloses ultra wideband radio frequency transmissions are performed over non-guided media (col 4, lines 35-50).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4357634 issued to Chung, herein referred to as Chung.

Referring to Claim 17:

Chung discloses a method of providing universal data exchange, the method comprising: organizing data into fields; identifying the fields in a file allocation table including pulse duration information (start and end information) for each of the fields (col 7, lines4-20); providing a receiving device with a driver program capable of understanding the file allocation table (col 15, lines 39-50); transmitting the file allocation table to the receiving device and transmitting the data fields identified in the file allocation table (col 10, lines 1-5; col 19, lines 38-55).

Chung does not explicitly disclose the claimed pulse start end information. However the duration information is equivalent to the claimed pulse start information. Therefore, it would have been obvious to one having ordinary skill in the art at the time that the invention was made

to modify the teachings of Chung such that the pulse information is start and end information. One of ordinary skill in the art would have been motivated to do this because it would enable the transmission of data along with a code table to enable a receiver to decode the data of the message (col 19, lines 38-55).

Referring to Claim 20:

Chung discloses the limitations as discussed in Claim 17 above. Chung further discloses the fields identified in the file allocation table are identified by reference to a standard format, which can be understood by the driver program (col 10, lines 1-5).

9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 4357634 issued to Chung as applied to Claim 17 above, and further in view of *Data and Computer Communications* by William Stallings, herein referred to as Stallings.

Referring to Claim 18:

Chung discloses the limitations as discussed in Claim 17 above.

Chung does not expressly disclose the claimed "e-mail type fields"

Stalling discloses fields are e-mail type fields (page 704, lines 1-10; page 705; lines 1-12; page 706, Table 19.7).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have an email type fields. One of ordinary skill in the art would have been

motivated to do this because it would provide a mechanism for transmitting email messages (page 70, lines 1).

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 4357634 issued to Chung as applied to Claim 17 above, and further in view of US Patent 5818442 issued to Adamson.

Referring to Claim 19:

Chung discloses the limitations as discussed in Claim 17 above.

Chung does not expressly disclose the claimed "business specific type fields"

Adamson discloses the fields are business specific type fields (Fig 6; col 5, lines 30-43).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have business fields. One of ordinary skill in the art would have been motivated to do this because it would provide a mechanism for transferring business cards (col 2 lines 1-10).

11. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jungers as applied to Claim 35 above, and further in view of *Data and Computer Communications* by William Stallings, herein referred to as Stallings.

Referring to Claim 36:

Jungers discloses the limitations as discussed in Claim 35 above.

Jungers does not expressly disclose the claimed "e-mail type fields"

Stalling discloses fields are e-mail type fields (page 704, lines 1-10; page 705; lines 1-12; page 706, Table 19.7).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have an email type fields. One of ordinary skill in the art would have been motivated to do this because it would provide a mechanism for transmitting email messages (page 70, lines 1).

12. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jungers as applied to Claim 35 above, and further in view of US Patent 5818442 issued to Adamson.

Referring to Claim 37:

Jungers discloses the limitations as discussed in Claim 35 above.

Jungers does not expressly disclose the claimed "business specific type fields"

Adamson discloses the fields are business specific type fields (Fig 6; col 5, lines 30-43).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have business fields. One of ordinary skill in the art would have been motivated to do this because it would provide a mechanism for transferring business cards (col 2 lines 1-10).

13. Claims 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6438140 issued to Jungers et al, herein referred to as Jungers in view of US Patent 6031862 issued to Fullerton et al, herein referred to as Fullerton.

Referring to Claim 42:

Jungers discloses the limitations as discussed in Claim 35 above.

Jungers does not expressly disclose the claimed "wherein the steps of transmitting are performed over guided media"

Fullerton discloses the steps of transmitting are performed over guided media (col 2, lines 20-55; col 13, lines 20-25).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Jungers to transmit data over guided media. One of ordinary skill in the art would have been motivated to do this because it would allow the transmission of data across via cables (col 13, lines 20-25).

Referring to Claim 44:

Jungers discloses the limitations as discussed in Claim 35 above.

Jungers does not expressly disclose the claimed "wherein the steps of transmitting use a duplex transmission method"

Fullerton discloses the steps of transmitting use a duplex transmission method (col 13, lines 20-40; col 2, lines 18-24).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Jungers to allow duplex transmission. One of ordinary skill in the art would have been motivated to do this because it would cell phone devices to communicate with each other (col 2, lines 18-24).

Prior Art

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6151602 issued to Hejlsberg, Anders et al. Hejlsberg discloses data is actually returned to the client by means of a "data packet" of the present invention, which is a platform-independent self-describing data format used to exchange data between different subsystems of the architecture. A data packet normally represents a result set, which is received by a client from a remote server, containing both data and metadata. Upon receiving the data packet from the provider, the client unpacks the data and then proceeds to process and manipulate the data as if it were local data (e.g., for insert, deletes, updates, and the like).

US 5339421 issued to Housel, III, Barron C. Housel discloses a common general parser and applications program interface for use in a data processing system. The parser encodes data from a program for transmission onto a channel and decodes incoming data for handoff to an applications program. Initialization of the parser includes allocating private storage for the individual data items to be encoded or decoded. The program requests data that is received by the parser or transmits data onto the channel by issuing a call to the parser. The call identifies

the parse table to be used by the parser. In response, the parser encodes or decodes the data in accordance with the identified parse table to extract the individual data items. The parser stores the individual data items in their respective allocated storage areas for the program during decoding or extracts the data items from the storage for encoding.

WO O1/97477 by Roberts et al. Roberts disclose a method of using codes to represent pulse characteristics. A value range layout can be subdivided into components, sub-components of components. Methods for specifying non-allowable regions within value range layout to be considered when generating a code.

Contact Information

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monplaisir G Hamilton whose telephone number is 1703-305-5116. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on 1703-305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are 1703-746-7239 for regular communications and 1703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 1703-305-3900.

Monplaisir Hamilton
March 22, 2003

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